



May 24, 2004

William A. Bonnet  
Vice President  
Government and Community Affairs

The Honorable Chairman and Members of  
the Hawaii Public Utilities Commission  
465 South King Street  
Kekuanaoa Building, 1st Floor  
Honolulu, Hawaii 96813

FILED  
2004 MAY 24 P 4: 10  
PUBLIC UTILITIES  
COMMISSION

Dear Commissioners:

Subject: Docket No. 03-0371 – Proceeding to Investigate Distributed Generation in Hawaii

Pursuant to Prehearing Order No. 20922, filed April 23, 2004, attached are  
HECO/HELCO/MECO's information requests ("IRs") to the following parties/participants\*:

Johnson Controls, Inc. ("JC")  
The Gas Company ("TGC")  
Hawaii Renewable Energy Alliance ("HREA")  
Life of the Land ("LOL")  
County of Maui ("Maui")  
Department of Business, Economic Development and Tourism ("DBEDT")  
Consumer Advocate ("CA")  
Kauai Island Utility Cooperative ("KIUC")  
Hess Microgen LLC ("Hess")

Sincerely,

Attachment

cc: Division of Consumer Advocacy (3)  
A. Miyamoto  
S. P. Golden  
B. T. Moto, Esq.  
K. K. Kobayashi  
J. Crouch  
H. Q. Curtis (3)  
C. S. Coleman, Esq.  
T. C. Gorak, Esq.  
J. Reisch  
G. Sato  
M. H. Kaya

A. M. Oshima, Esq. (2)  
G. T. Aoki, Esq.  
G. S. Gilman, Esq.  
C. Y. Young, Esq.  
W. S. Bollmeier II  
R. Reed  
S. Y. H. Wong, Esq.  
M. de'Marsi  
G. Bull  
L. D. H. Nakazawa, Esq.  
J. W. K. Chang, Esq.  
S. Alber

\* HECO/HELCO/MECO does not have IRs for the County of Kauai.

WINNER OF THE EDISON AWARD  
FOR DISTINGUISHED INDUSTRY LEADERSHIP



## INSTRUCTIONS TO ALL PARTIES AND PARTICIPANTS

1. With respect to the attached information requests, a party/participant should comply with all applicable rules for proceedings before the Public Utilities Commission, as well as Prehearing Order No. 20922 issued on April 23, 2004 in Docket No. 03-0371.
2. Throughout these information requests, the term “documents” or “agreements” refers to all writings and records of every type in your possession, control, or custody, including, but not limited to, memoranda, correspondence, reports, surveys, studies (including but not limited to, load flow, engineering, general economic and market studies), analyses (including, but not limited to, load flow, engineering, general economic and market analyses), comparisons, tabulations, charts, books, pamphlets, photographs, maps, bulletins, notes, diaries, newspaper clippings, log sheets, ledgers, transcripts, microfilm, computer data files, tapes, inputs, outputs, and print outs, vouchers, accounting statements, engineering diagrams (including “one-line” diagrams), mechanical and electric recordings, telephone and telegraphic communication, speeches and all other records, written, electronic, mechanical, and otherwise.

“Documents” shall also refer to copies of documents, even though the originals are not in your possession, custody, or control, every copy of a document which contains handwritten or other notations or which otherwise does not duplicate the original or any other copy, and all attachments to any documents.
3. When an information request makes reference to specific documentation used by the party/participant to support its response, it is not intended that the request be limited to just the specific document referenced in the request. The response should include any non-privileged memoranda, internal or external studies, assumptions, party/participant instructions, or any other relevant authoritative source which the party/participant used.

## DEFINITIONS TO FACILITATE RESPONDING TO INFORMATION REQUESTS

Define CHP Systems. CHP Systems are a form of distributed generation (“DG”) that utilize waste heat from the power generation process as energy (heat or steam) for heating or cooling purposes.

Define DG. DG involves the use of small scale electric generating technology installed at, or in close proximity to, the end-user’s location. The term DG refers to distributed generation (using conventional internal combustion engines) installed at or near a customer site, and operated in parallel with the utility grid, for the primary purpose of providing electricity to the customer.

Define Agreement. For purposes of these information requests, the term Agreement means a contract, memorandum of understanding, letter of intent or other commitment or understanding.

Define Business Arrangement. For purposes of these information requests, the term Business Arrangement refers to a joint venture, partnership, teaming, agency or other arrangement with one or more other business entities.

Define the Company. For purposes of these information requests, the Company refers to Hawaiian Electric Company, Inc., Maui Electric Company, Limited, and Hawaii Electric Light Company, Inc., either singularly or in combination.

HECO/HELCO/MECO  
Information Requests (“IRs”) to Johnson Controls, Inc. (“JC”)

HECO/JC-IR-1      Ref: JC Preliminary Statement of Position, pages 5-9  
In order to facilitate the implementation of DG, isn’t it appropriate for the regulated electric utility to be an active participant in the DG market? If the answer is no, please explain why not.

HECO/JC-IR-2      Ref: JC Preliminary Statement of Position, pages 5-9  
If DG and CHP systems are beneficial in helping to meet the State’s energy goals (e.g., increased energy efficiency and a reduction in the use of fossil fuels), then why would it not be reasonable for a regulated electric utility to be an active owner/operator in the DG/CHP market?

HECO/JC-IR-3      Ref: JC Preliminary Statement of Position, pages 18-20  
If the regulated electric utility plans to implement a DG/CHP project that has ancillary HVAC equipment that is part of the overall system, and if the regulated electric utility will source this ancillary HVAC equipment and its operation and maintenance through requests for proposals from third party vendors, then please specify what are JC’s concerns?

HECO/JC-IR-4      Ref: JC Preliminary Statement of Position, pages 11-13  
Does JC believe that the Commission has the appropriate authority to oversee the regulated electric utilities’ involvement in DG/CHP projects? If the answer is no, please explain why not.

HECO/JC-IR-5      Ref: JC Preliminary Statement of Position, pages 2-3

- a. Does JC acknowledge that to date there has been only a limited number of DG/CHP projects implemented in the State of Hawaii?
- b. Does JC acknowledge that the involvement of the regulated electric utility in the DG/CHP market should result in a larger potential market for DG/CHP installations?

HECO/JC-IR-6      Ref: JC Preliminary Statement of Position, pages 3-4  
In its CHP Program application, at pages 11-13, Docket No. 03-0366, HECO proposed to file annual reports with the Commission on the status of its CHP projects.

- a. Does JC maintain that this is a reasonable reporting process that will adequately keep the Commission informed of developments in the implementation of the DG/CHP market?
- b. Does JC propose to file similar reports with the Commission for its CHP projects? If the answer is no, please explain why not.

HECO/JC-IR-7      Ref: JC Preliminary Statement of Position, pages 5-9  
Does JC acknowledge that utility participation in the DG/CHP market on a regulated basis should lead to a larger market than the current status quo of only a limited number of DG/CHP projects being implemented in Hawaii?

HECO/JC-IR-8      Ref: JC Preliminary Statement of Position, page 5  
Does JC acknowledge that the regulated electric utilities' involvement in the DG/CHP market will help to ensure that DG benefits are maximized?

HECO/JC-IR-9      Ref: JC Preliminary Statement of Position, page 14  
Does JC acknowledge that until the installation of DG/CHP systems increase and there is an adequate track record of these systems' performance, that it would be premature at this time to assert that DG/CHP can delay and/or replace T&D facilities?

HECO/JC-IR-10      Ref: JC Preliminary Statement of Position, page 22  
Does JC believe that it is prudent for the regulated electric utility to adopt a portfolio type approach to meeting the electric needs of its customers with a combination of DG/CHP resources, central station generation, renewables, demand-side management programs and conservation initiatives?

HECO/JC-IR-11      Ref: JC Preliminary Statement of Position, page 14  
Please explain in greater detail the positive impacts that DG/CHP will have on power quality and reliability.

HECO/JC-IR-12      Ref: JC Preliminary Statement of Position, pages 20-21  
a. What specific sections of HECO's Commission approved Rule 14H need to be revisited?  
b. For the specific sections listed in response to part a. above, please provide an explanation as to what needs to be revisited and the benefit to the utility, other utility customers and/or the DG owner/operator of any proposed revision.

HECO/JC-IR-13      Ref: JC Preliminary Statement of Position, page 5  
What information does JC believe the utility has regarding a customer's energy usage that the customer does not have?

HECO/JC-IR-14      Ref: JC Preliminary Statement of Position, page 6  
a. How does JC propose that customer confidential information be made available to all potential competitors without compromising a customer's competitive position relative to another customer competing in the same business (i.e. a hotel's energy costs)?  
b. How are all potential competitors to be identified?  
c. What is the proposed mechanism for distribution of the information?

HECO/JC-IR-15      Ref: JC Preliminary Statement of Position, page 7  
JC is in the business of providing CHP systems to customers. How has it to date secured the customer information necessary to design and price such systems?

HECO/JC-IR-16      Ref: JC Preliminary Statement of Position, page 7  
If the Commission exercises its oversight of the utility to ensure cross-subsidization does not occur, how is the utility position different from that of JC?

HECO/JC-IR-17      Ref: JC Preliminary Statement of Position, page 12

If the utility provides CHP services through a separate unregulated affiliate, would not the customer load served by that affiliate or any competitor represent a loss of revenue to the regulated utility and thereby require that fixed cost revenues be allocated to the remaining customers? If the answer is no, please explain why not?

HECO/JC-IR-18      Ref: JC Preliminary Statement of Position, page 14

How is the strain on distribution system alleviated if the utility must provide back-up support to the CHP system?

HECO/JC-IR-19      Ref: JC Preliminary Statement of Position, page 17

- a. Does JC have any preferred supplier agreements for equipment it purchases? If so, what is the typical term of such agreements?
- b. Does JC competitively bid every component of a CHP system that it installs?

HECO/JC-IR-20      Ref: JC Preliminary Statement of Position, page 23

- a. How is the pricing structured between JC and a customer for whom JC provides a CHP system?
- b. What level of savings does JC believe is necessary to induce a customer to enter into a CHP agreement?

HECO/JC-IR-21      Ref: JC Preliminary Statement of Position, page 4

JC's Preliminary Statement of Position states: "Reasonable standards concerning interconnections between distributed generation projects and the existing electric system should be developed in this docket and applied consistently to all entities engaged in such projects. Thus, existing interconnection standards should be revisited to ensure that they are consistent with the goal of encouraging the development of a competitive market for distributed generation."

- a. Please identify all the criteria that should be used to determine whether "interconnection standards" are "reasonable".

HECO/JC-IR-22      Ref: JC Preliminary Statement of Position, page 4

JC's Preliminary Statement of Position states: "All entities that compete with each other to provide distributed generation services - - including any affiliate of a regulated electric utility - - should have equal and simultaneous access to information and data concerning potential distributed generation service customers and the electric system."

- a. Identify all the "information and data concerning potential distributed generation service customers" that would be available to utilities that would not be available to other DG providers.

HECO/JC-IR-23      Ref: JC Preliminary Statement of Position, page 13

JC's Preliminary Statement of Position states: "Normal contract principles should be applied to determine whether such facilities would be owned by the seller of the equipment or the customer, or would be leased to the customer."

- a. Identify the "normal contract principles" referred to above.

- b. For each “normal contract principle” identified in “a” above, explain in detail how that principle would be “applied” to determine that “such facilities” would be (i) owned by “the seller of the equipment”, (ii) owned by the “customer”, or (iii) “leased to the customer”.

HECO/JC-IR-24      Ref: JC Preliminary Statement of Position, page 20

JC’s Preliminary Statement of Position states: “As noted above, JCI believes that standards for such interconnections should be applicable to all entities without exception (including the regulated electric utilities or their affiliates), should be reasonable, should be easily understood, and should not be used to unduly delay any distributed generation project.”

- a. Are HECO’s Interconnection Standards (Appendix I to HECO’s Rule 14) “applicable to all entities without exception”? Please fully explain your response.
- b. Are HECO’s Interconnection Standards “reasonable”? Please fully explain your response.
- c. Are HECO’s Interconnection Standards “easily understood”? Please fully explain your response.
- d. Are HECO’s Interconnection Standards “used to unduly delay any distributed generation project”? Please fully explain your response.

HECO/JC-IR-25      Ref: JC Preliminary Statement of Position, page 29

JC’s Preliminary Statement of Position states: “JCI submits that pilot projects are unnecessary because distributed generation is a proven technology that can be implemented now.”

- a. Identify all of the distribution generation technologies that JC considers to be “a proven technology that can be implemented now”.
- b. Does JC consider “renewable energy facilities” (as that term is used on page 12 of JC’s Preliminary Statement of Position) to be a “proven technology that can be implemented now.” Fully explain your answer.
- c. Does JC consider “hybrid renewable energy systems” to be a “proven technology that can be implemented now.” Fully explain your answer.
- d. How is the pricing structured between JC and a customer for whom JC provides a CHP system?
- e. What level of savings does JC believe is necessary to induce a customer to enter into a CHP agreement?

HECO/JC-IR-26      Ref: JC Preliminary Statement of Position, page 2

In the past five years, has JC installed internal combustion engines, microturbines and/or cogeneration/CHP systems for its customers in the State of Hawaii? If so, please provide details of any such installations, including size of the unit, system cost, system availability and copies of any documents that generally describe these systems.

HECO/JC-IR-27      Ref: JC Preliminary Statement of Position, page 2

- a. Please state whether JC has signed any agreements with suppliers of CHP equipment to provide such equipment for JC’s CHP projects.
- b. If so, please provide copies of any such agreements.

- c. Were competitive bid procedures used to select the supplier(s) with whom such agreements were signed? If the answer is no, please explain why not?

HECO/JC-IR-28 Ref: JC Preliminary Statement of Position, pages 11-13

Does JC believe that the Commission should not regulate third-party owned CHP and/or DG installations? Please provide copies of any documents relied upon in providing this response.

HECO/JC-IR-29 Ref: JC Preliminary Statement of Position, page 2

- a. Please provide a list of JC's DG and/or CHP systems that are currently located at customers' sites that are either operational or that will become operational during the 2004-2006 timeframe.
- b. For the list provided in response to part a. above, please provide the type of equipment installed (or planned to be installed) and system information, including the size of the unit, system cost, system availability and copies of any documents that generally describe these systems.
- c. For any systems provided in response to part a. above, if applicable, please identify the systems that had performance problems, fuel problems, and/or maintenance problems. Please specify the type of system involved, the manufacturer, and identify the specific nature of each such problem and state how the problem(s) was remedied.

HECO/JC-IR-30 Ref: JC Preliminary Statement of Position, page 2

Has JC entered into any letters on intent or made any written commitments to customers to install DG and/or CHP systems in the State of Hawaii for the 2004-2006 timeframe. If so, please provide a list of these customers.

HECO/JC-IR-31 Ref: JC Preliminary Statement of Position, page 2

In HECO's CHP Program application, filed October 10, 2003, Exhibit A provided HECO/HELCO/MECO's forecast of the market potential for CHP systems by service territory.

- a. Does JC agree with HECO/HELCO/MECO's assessment of the CHP market potential?
- b. If JC does not agree with HECO/HELCO/MECO's assessment of the CHP market potential, please provide JC's assessment of the CHP market potential for the period 2004-2022. Please provide copies of any documents that JC used in the development of its CHP system market potential.

HECO/JC-IR-32 Ref: JC Preliminary Statement of Position, page 2

Which of the following services has JC offered to provide in Hawaii with respect to CHP Systems?

- a. Designer of a CHP System
- b. Vendor or packager of a CHP System
- c. Installation, or contractor for the installation, of a CHP System



- d. Owner, or contractor for the third-party ownership, of a CHP System
- e. Operation of a CHP System
- f. Maintenance of a CHP System

HECO/JC-IR-33      Ref: JC Preliminary Statement of Position, page 2  
Which of the following services has JC offered to provide in Hawaii with respect to DG Systems?

- a. Designer of a DG System
- b. Vendor or packager of a DG System
- c. Installation, or contractor for the installation, of a DG System
- d. Owner, or contractor for the third-party ownership, of a DG System
- e. Operation of a DG System
- f. Maintenance of a DG System

HECO/JC-IR-34      Ref: JC Preliminary Statement of Position, page 2  
Which of the following services has JC offered to provide in Hawaii with respect to HVAC Systems?

- a. Designer of a HVAC System
- b. Vendor or packager of a HVAC System
- c. Installation, or contractor for the installation, of a HVAC System
- d. Owner, or contractor for the third-party ownership, of a HVAC System
- e. Operation of a HVAC System
- f. Maintenance of a HVAC System

HECO/JC-IR-35      Ref: JC Preliminary Statement of Position, page 2  
Which of the following services has JC offered to provide, or participated in an offer to provide, through a Business Arrangement?

- a. Designer of a CHP System
- b. Vendor or packager of a CHP System
- c. Installation, or contractor for the installation, of a CHP System
- d. Owner, or contractor for the third-party ownership, of a CHP System
- e. Operation of a CHP System
- f. Maintenance of a CHP System

HECO/JC-IR-36      Ref: JC Preliminary Statement of Position, page 2  
Which of the following services has JC offered to provide, or participated in an offer to provide, through a Business Arrangement?

- a. Designer of a DG System

- b. Vendor or packager of a DG System
- c. Installation, or contractor for the installation, of a DG System
- d. Owner, or contractor for the third-party ownership, of a DG System
- e. Operation of a DG System
- f. Maintenance of a DG System

HECO/JC-IR-37 Ref: JC Preliminary Statement of Position, page 2

Which of the following services has JC offered to provide, or participated in an offer to provide, through a Business Arrangement?

- a. Designer of a HVAC System
- b. Vendor or packager of a HVAC System
- c. Installation, or contractor for the installation, of a HVAC System
- d. Owner, or contractor for the third-party ownership, of a HVAC System
- e. Operation of a HVAC System
- f. Maintenance of a HVAC System

HECO/JC-IR-38 Ref: JC Preliminary Statement of Position, page 2

For each arrangement identified in response to HECO/JC-IR-32 to 34, identify (a) the nature and form of the arrangement, (b) the business entities involved in the arrangement, and (c) the approximate time frame for or the term of the arrangement.

HECO/JC-IR-39 Ref: JC Preliminary Statement of Position, page 2

For each of the Business Arrangements identified in response to HECO/JC-IR-35 to 37 for which the Business Arrangement was in writing, provide the document(s) evidencing the business arrangement.

HECO/JC-IR-40 Ref: JC Preliminary Statement of Position, page 2

To which of the following types of commercial customers has JC offered to provide CHP System services, or offered to provide CHP System services through participation in a Business Arrangement?

- a. Hotels
- b. Condominiums
- c. Hospitals
- d. Grocery Stores
- e. Retailers or Wholesalers of Products
- f. Retirement Homes
- g. Government Institutions or Buildings
- f. Other Commercial Businesses

HECO/JC-IR-41 Ref: JC Preliminary Statement of Position, page 2

For each such offer or proposal identified in response to HECO/JC-IR-40, identify the following: (a) the form of the offer or proposal, (b) the date or approximate time frame in

which the offer or proposal was made if the date is not known, (c) the potential customer to whom the offer or proposal was made, (d) the make, model and size of the generation to be installed as part of the offer or proposal, (e) the proposed use of the waste heat from the generation, and the type of equipment included in the offer to make use of the waste heat, (f) the pricing structure for the offer or proposal, (g) the term of the agreement involved in the offer or the proposal, and (h) the nature of any services to be provided after the installation of the CHP Systems involved in the offer or proposal, and the terms and conditions upon what such services would continue to be provided.

HECO/JC-IR-42      Ref: JC Preliminary Statement of Position, page 2

To which of the following types of commercial customers has JC offered to provide DG System services, or offered to provide DG System services through participation in a Business Arrangement?

- a.      Hotels
- b.      Condominiums
- c.      Hospitals
- d.      Grocery Stores
- e.      Retailers or Wholesalers of Products
- f.      Retirement Homes
- g.      Government Institutions or Buildings
- f.      Other Commercial Businesses

HECO/JC-IR-43      Ref: JC Preliminary Statement of Position, page 2

For each such offer or proposal identified in response to HECO/JC-IR-42, identify the following: (a) the form of the offer or proposal, (b) the date or approximate time frame in which the offer or proposal was made if the date is not known, (c) the potential customer to whom the offer or proposal was made, (d) the make, model and size of the generation to be installed as part of the offer or proposal, (e) the proposed use of the waste heat from the generation, and the type of equipment included in the offer to make use of the waste heat, (f) the pricing structure for the offer or proposal, (g) the term of the agreement involved in the offer or the proposal, and (h) the nature of any services to be provided after the installation of the CHP Systems involved in the offer or proposal, and the terms and conditions upon what such services would continue to be provided.

HECO/JC-IR-44      Ref: JC Preliminary Statement of Position, page 2

To which of the following types of commercial customers has JC offered to provide HVAC System services, or offered to provide HVAC System services through participation in a Business Arrangement?

- a.      Hotels
- b.      Condominiums
- c.      Hospitals
- d.      Grocery Stores
- e.      Retailers or Wholesalers of Products
- f.      Retirement Homes

- g. Government Institutions or Buildings
- f. Other Commercial Businesses

HECO/JC-IR-45      Ref: JC Preliminary Statement of Position, page 2

For each such offer or proposal identified in response to HECO/JC-IR-44, identify the following: (a) the form of the offer or proposal, (b) the date or approximate time frame in which the offer or proposal was made if the date is not known, (c) the potential customer to whom the offer or proposal was made, (d) the make, model and size of the generation to be installed as part of the offer or proposal, (e) the proposed use of the waste heat from the generation, and the type of equipment included in the offer to make use of the waste heat, (f) the pricing structure for the offer or proposal, (g) the term of the agreement involved in the offer or the proposal, and (h) the nature of any services to be provided after the installation of the CHP Systems involved in the offer or proposal, and the terms and conditions upon what such services would continue to be provided.

HECO/JC-IR-46      Ref: JC Preliminary Statement of Position, page 2

For each such offer or proposal which was made in writing identified in response to HECO/JC-IR-32 to 45, provide the document(s) evidencing the offer or proposal.

HECO/JC-IR-47      Ref: JC Preliminary Statement of Position, page 2

For each such offer or proposal resulting in one or more contracts identified in response to HECO/JC-IR-32 to 45, provide the contracts.

HECO/JC-IR-48      Ref: JC Preliminary Statement of Position, page 2

In making offers or proposals to potential customers for CHP System services, either by JC or by a Business Arrangement in which JC has been involved, has JC or the Business Arrangement requested information from the potential customer regarding its 1) electrical usage, 2) gas usage, and/or 3) energy usage?

HECO/JC-IR-49      Ref: JC Preliminary Statement of Position, page 2

For each such offer or proposal for which JC, or a Business Arrangement in which JC has participated, identified in response to HECO/JC-IR-32 to 45, has been able to obtain 1) electrical usage information, 2) gas usage information, and/or 3) energy usage information, identify the source of the information.

HECO/JC-IR-50      Ref: JC Preliminary Statement of Position, page 2

In each case where JC, or a Business Arrangement in which JC has participated, has requested 1) electrical usage information, 2) gas usage information, and/or 3) energy usage information, from a potential customer, identified in response to HECO/JC-IR-32 to 45, and the customer has not provided the information, provide the identify of the customer and the reason given by the customer for not providing the information.

HECO/JC-IR-51      Ref: JC Preliminary Statement of Position, page 2

Does JC currently own any CHP Systems, or participate in the ownership of any CHP Systems through a Business Arrangement , in Hawaii. Identify the customer for and the site of each such CHP System.

HECO/JC-IR-52      Ref: JC Preliminary Statement of Position, page 2

Does JC currently provide any maintenance services for CHP Systems in Hawaii? For each CHP System for which JC provides maintenance services, identify the CHP System (including, but not limited to, the make, model, and size of the generating units included in the system), the customer for the CHP System, and the site of the CHP System.

HECO/JC-IR-53      Ref: JC Preliminary Statement of Position, page 2

- a. Which vendors of CHP Systems offer to install CHP Systems in Hawaii?
- b. Which of such vendors have a Hawaii-based marketing staff?
- c. Which of such vendors have a Hawaii-based marketing staff?
- d. Which of such vendors have a Hawaii-based maintenance staff?
- e. Which of such vendors offer an ownership option whereby the customer for the CHP System purchases electricity and waste heat, and does not own the CHP System?

HECO/JC-IR-54      Ref: JC Preliminary Statement of Position, page 2

To which potential customer for CHP Systems has JC, or a Business Arrangement in which JC has participated, made statements to the effect that the Company is “tied up in regulatory proceedings, while JC (or the Business Arrangement) can act now” or other words to that effect? Identify each such potential customer to whom such a representation has been made.

HECO/JC-IR-55      Ref: JC Preliminary Statement of Position, page 2

Is there currently a market for CHP Systems for single-family residences? If the response to this information request is other than “no”, identify the extent of the market and explain the basis for the response.

HECO/JC-IR-56      Ref: JC Preliminary Statement of Position, page 2

Is there currently a market for DG Systems for single-family residences? If the response to this information request is other than “no”, identify the extent of the market and explain the basis for the response.

HECO/JC-IR-57      Ref: JC Preliminary Statement of Position, page 2

Does JC currently own any DG Systems, or participate in the ownership of any DG Systems through a Business Arrangement, in Hawaii. Identify the customer for and the site of each such DG System.

HECO/JC-IR-58      Ref: JC Preliminary Statement of Position, page 2

Does JC currently provide any maintenance services for DG Systems in Hawaii? For each DG System for which JC provides maintenance services, identify the DG System (including, but not limited to, the make, model, and size of the generating units included in the system), the customer for the CHP System, and the site of the CHP System.

HECO/HELCO/MECO  
Information Requests (“IRs”) to The Gas Company (“TGC”)

HECO/TGC-IR-1      Ref: TGC Preliminary Statement of Position, pages 4-5  
In order to facilitate the implementation of DG, isn't it appropriate for the regulated electric utility to be an active participant in the DG market? If the answer is no, please explain why not.

HECO/TGC-IR-2      Ref: TGC Preliminary Statement of Position, pages 4-5  
If DG and CHP systems are beneficial in helping to meet the State's energy goals (e.g., increased energy efficiency and a reduction in the use of fossil fuels), then why would it not be reasonable for a regulated electric utility to be an active owner/operator in the DG/CHP market?

HECO/TGC-IR-3      Ref: TGC Preliminary Statement of Position, pages 4-5

- a. If a regulated electric utility is permitted to own/operate user sited DG systems, what are the significant impacts on other utilities and utility customers that the regulatory agencies need to consider?
- b. What specific regulatory agencies is TGC referring to?

HECO/TGC-IR-4      Ref: TGC Preliminary Statement of Position, pages 5-6  
Does TGC believe that the Commission has the appropriate authority to oversee the regulated electric utilities' involvement in DG/CHP projects? If the answer is no, please explain why not.

HECO/TGC-IR-5      Ref: TGC Preliminary Statement of Position, page 2

- a. Does TGC acknowledge that to date there has been only a limited number of DG/CHP projects implemented in the State of Hawaii?
- b. Does TGC acknowledge that the involvement of the regulated electric utility in the DG/CHP market should result in a larger potential market for DG/CHP installations?

HECO/TGC-IR-6      Ref: TGC Preliminary Statement of Position, pages 3-5  
Does TGC acknowledge that utility participation in the DG/CHP market on a regulated basis should lead to a larger market than the current status quo of only a limited number of DG/CHP projects being implemented in Hawaii?

HECO/TGC-IR-7      Ref: TGC Preliminary Statement of Position, page 7  
Does TGC acknowledge that until the installation of DG/CHP systems increase and there is an adequate track record of these systems' performance, that it would be premature at this time to assert that DG/CHP can delay and/or replace T&D facilities?

HECO/TGC-IR-8      Ref: TGC Preliminary Statement of Position, pages 9-10  
Does TGC believe that it is prudent for the regulated electric utility to adopt a portfolio type approach to meeting the electric needs of its customers with a combination of

DG/CHP resources, central station generation, renewables, demand-side management programs and conservation initiatives?

HECO/TGC-IR-9 Ref: TGC Preliminary Statement of Position, pages 7-8  
For the benefits cited (increasing the State's energy security by diversifying the fuels used, reduce emissions, and the strategic system benefits of DG in the event of system disruptions), in order to help achieve these goals then why shouldn't the regulated electric utility be permitted to contribute to these benefits via owning and operating DG/CHP systems?

HECO/TGC-IR-10 Ref: TGC Preliminary Statement of Position, page 2  
In the case where gas facilities are sited on a user's property and are designed and used only to meet the gas needs of that user or property (and are therefore declared non-utility), are the gas facilities tied to the regulated gas distribution grid? If a CHP system is tied to the regulated utility grid, is it possible for the CHP generator to be used for any purpose other than service only to a specific customer?

HECO/TGC-IR-11 Ref: TGC Preliminary Statement of Position, page 4  
What degree of operational control over customer or 3<sup>rd</sup> party owned DG is necessary to ensure that reliability is the same as that which is possible when the utility owns and operates the facility and therefore controls the quality and timing of maintenance as well as the dispatch?

HECO/TGC-IR-12 Ref: TGC Preliminary Statement of Position, page 5  
a. Should a customer be deprived of the savings available to it by installing a CHP system?  
b. Should the other benefits that accrue from the efficiency of a CHP system be foregone because of the potential reduction in gas sales?

HECO/TGC-IR-13 Ref: TGC Preliminary Statement of Position, page 5  
How much gas utility sales are at risk from potential CHP installations?

HECO/TGC-IR-14 Ref: TGC Preliminary Statement of Position, page 5  
a. Would gas utility ownership of a CHP installation that replaces electric utility power effectively transfer electric utility sales to the gas utility? Should steps be taken to prevent impacts such as this from occurring?  
b. Should the gas utility be prevented from entering the DG market?

HECO/TGC-IR-15 Ref: TGC Preliminary Statement of Position, page 1  
TGC's Preliminary Statement of Position states: "TGC believes that the DG concerns and potential solutions offered in this proceeding may differ depending on the size and number of units, the number of end users being served, and the uses of the power being generated. Therefore, for purposes of this preliminary statement of position, TGC has examined and responded to the issues as they relate to small-scale distributed generation projects that are located on the end user's property and are primarily designed and used to

serve only the electrical needs of that end user or property. However, in the course of this proceeding, TGC may take a position(s) on other types of DG installations.”

- a. Describe and quantify what TGC considers “small-scale distributed generation projects”.
- b. Describe in detail TGC’s position on each of the issues in this docket as they relate to DG projects that are not “small-scale distributed generation projects that are located on the end user’s property and are primarily designed and used to serve only the electrical needs of that end user or property.”

HECO/TGC-IR-16 Ref: TGC Preliminary Statement of Position, page 4

TGC’s Preliminary Statement of Position states: “The effect of user-sited DG on utility reliability is no different whether the DG is owned or operated by the utility, by the customer, or by an independent third party. That is, the system reliability and benefits that accrue from user-sited DG are a function of unit characteristics and other external factors that are not related to ownership. Therefore, the effect on utility service is not a justification for the utilities to own and/or operate user-sited DG.”

- a. Does the performance of operation and maintenance on a distributed generating unit have an impact on the number of hours in which a unit will be available to operate?
- b. If maintenance is not performed on a distributed generating unit, could that impact the number of hours in which a unit will be available to operate?

HECO/TGC-IR-17 Ref: TGC Preliminary Statement of Position, page 6

TGC’s Preliminary Statement of Position states: “With regard to small, user-sited DG installations that are not designed or used to deliver power to the electric grid, TGC believes that the impact will be generally limited to ensuring that Commission-approved requirements and any other applicable governmental requirements are met by the user and the electric utilities.

- a. Identify all the “Commission-approved requirements” referenced above.
- b. Identify all the “other applicable governmental requirements” referenced above.

HECO/TGC-IR-18 Ref: TGC Preliminary Statement of Position, page 6

TGC’s Preliminary Statement of Position states: “With regard to small, user-sited DG installations that are not designed or used to deliver power to the electric grid, TGC believes that the impact will be generally limited to the user. For users also taking firm and/or backup power from the electric utility, TGC believes that the Commission-approved requirements for electric service will prevent most, if not all, potential power quality or reliability disturbances from affecting the electric grid.”

- a. Identify all the “Commission-approved requirements” referenced above.
- b. Is it TGC’s position that “small, user-sited DG installations that are not designed or used to deliver power to the electric grid” will have no impact on the utility system? Fully explain your response.



HECO/TGC-IR-19 Ref: TGC Preliminary Statement of Position, page 8

- a. Does TGC believe that engineering and design issues (e.g., interconnection standards) “must be considered to allow a distributed generating facility to interconnect with the electric utility’s grid?” Fully explain your response.
- b. Identify what TGC believes “must be considered to allow a distributed generating facility to interconnect with the electric utility’s grid”.

## HECO/HELCO/MECO

### Information Requests (“IRs”) to the Hawaii Renewable Energy Alliance (“HREA”)

HECO/HREA-IR-1 Ref: HREA Preliminary Statement of Position, pages 6-7

In order to facilitate the implementation of DG, isn't it appropriate for the regulated electric utility to be an active participant in the DG market? If the answer is no, please explain why not.

HECO/HREA-IR-2 Ref: HREA Preliminary Statement of Position, pages 6-7

If DG and CHP systems are beneficial in helping to meet the State's energy goals (e.g., increased energy efficiency and a reduction in the use of fossil fuels), then why would it not be reasonable for a regulated electric utility to be an active owner/operator in the DG/CHP market?

HECO/HREA-IR-3 Ref: HREA Preliminary Statement of Position, pages 7-8

Does HREA believe that the Commission has the appropriate authority to oversee the regulated electric utilities' involvement in DG/CHP projects? If the answer is no, please explain why not.

HECO/HREA-IR-4 Ref: HREA Preliminary Statement of Position, pages 2-3

- a. Does HREA acknowledge that to date there has been only a limited number of DG/CHP projects implemented in the State of Hawaii?
- b. Does HREA acknowledge that the involvement of the regulated electric utility in the DG/CHP market should result in a larger potential market for DG/CHP installations?

HECO/HREA-IR-5 Ref: HREA Preliminary Statement of Position, pages 6-7

Does HREA acknowledge that utility participation in the DG/CHP market on a regulated basis should lead to a larger market than the current status quo of only a limited number of DG/CHP projects being implemented in Hawaii?

HECO/HREA-IR-6 Ref: HREA Preliminary Statement of Position, pages 13-14

If the regulated utility should be allowed cost recovery for those costs associated with implementing DG under IRP, then why shouldn't the regulated electric utility also be allowed to own and operate DG/CHP systems?

HECO/HREA-IR-7 Ref: HREA Preliminary Statement of Position, page 7

- a. Does HREA acknowledge that the Commission has the requisite authority to monitor the regulated electric utility involvement in the DG/CHP market such that it does not “exert its monopoly power and unfairly influence the marketplace”?
- b. Please explain what is meant by “exert its monopoly power”.
- c. Please explain what is meant by “unfairly influence the marketplace”.

HECO/HREA-IR-8 Ref: HREA Preliminary Statement of Position, page 10  
Does HREA acknowledge that until the installation of DG/CHP systems increase and there is an adequate track record of these systems' performance, that it would be premature at this time to assert that DG/CHP can delay and/or replace T&D facilities?

HECO/HREA-IR-9 Ref: HREA Preliminary Statement of Position, page 14-15  
Does HREA believe that it is prudent for the regulated electric utility to adopt a portfolio type approach to meeting the electric needs of its customers with a combination of DG/CHP resources, central station generation, renewables, demand-side management programs and conservation initiatives?

HECO/HREA-IR-10 Ref: HREA Preliminary Statement of Position, page 12  
Please quantify in terms of barrels of LSFO and/or diesel fuel the significant potential for DG to reduce the use of fossil fuels.

HECO/HREA-IR-11 Ref: HREA Preliminary Statement of Position, page 9-10  
Please explain in greater detail the positive impacts that DG/CHP will have on power quality and reliability.

HECO/HREA-IR-12 Ref: HREA Preliminary Statement of Position, page 6  
Please define what you mean by the terms "feasible" and "viable".

HECO/HREA-IR-13 Ref: HREA Preliminary Statement of Position, page 7  
What detailed customer knowledge does the utility have that is not available from the customer?

HECO/HREA-IR-14 Ref: HREA Preliminary Statement of Position, page 7  
Please explain what you mean by the phrase "backing by the ratepayers".

HECO/HREA-IR-15 Ref: HREA Preliminary Statement of Position, page 7

- a. Does a project developer's financial strength matter in terms of mitigating risk to customers?
- b. Should there be limits on financial strength of firms that participate in the DG market?
- c. Do other entities in the DG industry exist that have greater financial strength and backing than the electric utility?

HECO/HREA-IR-16 Ref: HREA Preliminary Statement of Position, page 7  
How would you propose that any rebate for DG be funded?

HECO/HREA-IR-17 Ref: HREA Preliminary Statement of Position, page 10  
What is the normal basis for determining the amount of spinning reserve required?

HECO/HREA-IR-18 Ref: HREA Preliminary Statement of Position, page 15

- a. What would be the key elements of standard offer contracts for DG?
- b. What is the role of the utility in the contemplated transaction?

HECO/HREA-IR-19 Ref: HREA Preliminary Statement of Position, pages 12-13

- c. Does HREA believe that any specific sections of HECO's Commission approved Rule 14H need to be revised?
- d. For the specific sections listed in response to part a. above, please provide an explanation as to what needs to be revised and the benefit to the utility, other utility customers and/or the DG owner/operator of the proposed revision.

HECO/HELCO/MECO  
Information Requests (“IRs”) to Life of the Land (“LOL”)

HECO/LOL-IR-1      Ref: LOL Preliminary Statement of Position, pages 21-22  
In order to facilitate the implementation of DG, isn’t it appropriate for the regulated electric utility to be an active participant in the DG market? If the answer is no, please explain why not.

HECO/LOL-IR-2      Ref: LOL Preliminary Statement of Position, pages 21-22  
If DG and CHP systems are beneficial in helping to meet the State’s energy goals (e.g., increased energy efficiency and a reduction in the use of fossil fuels), then why would it not be reasonable for a regulated electric utility to be an active owner/operator in the DG/CHP market?

HECO/LOL-IR-3      Ref: LOL Preliminary Statement of Position, page 22  
Does LOL believe that the Commission has the appropriate authority to oversee the regulated electric utilities’ involvement in DG/CHP projects? If the answer is no, please explain why not.

HECO/LOL-IR-4      Ref: LOL Preliminary Statement of Position, pages 21-22  
Why would a regulated electric utility have to divest itself of its generation division in order to be an active participant in the DG/CHP market?

HECO/LOL-IR-5      Ref: LOL Preliminary Statement of Position, pages 21-22  
Does LOL maintain that the divestiture of the generation divisions by the regulated electric utilities in California was successful in meeting the energy needs in a reasonable manner of California ratepayers?

HECO/LOL-IR-6      Ref: LOL Preliminary Statement of Position, page 26

- a. Does LOL acknowledge that to date there has been only a limited number of DG/CHP projects implemented in the State of Hawaii?
- b. Does LOL acknowledge that the involvement of the regulated electric utility in the DG/CHP market should result in a larger potential market for DG/CHP installations?

HECO/LOL-IR-7      Ref: LOL Preliminary Statement of Position, pages 21-22  
Does LOL acknowledge that utility participation in the DG/CHP market on a regulated basis should lead to a larger market than the current status quo of only a limited number of DG/CHP projects being implemented in Hawaii?

HECO/LOL-IR-8      Ref: LOL Preliminary Statement of Position, page 26  
LOL asserts that all future generation be DG. If all future generation is DG, and the regulated electric utility is not permitted to participate in the market, then isn’t there the potential that remaining customers could be significantly impacted if DG/CHP systems are not owned/operated by the regulated electric utility?

HECO/LOL-IR-9 Ref: LOL Preliminary Statement of Position, page 23  
Does LOL acknowledge that until the installation of DG/CHP systems increase and there is an adequate track record of these systems' performance, that it would be premature at this time to assert that DG/CHP can delay and/or replace T&D facilities?

HECO/LOL-IR-10 Ref: LOL Preliminary Statement of Position, page 25  
Does LOL believe that it is prudent for the regulated electric utility to adopt a portfolio type approach to meeting the electric needs of its customers with a combination of DG/CHP resources, central station generation, renewables, demand-side management programs and conservation initiatives?

HECO/LOL-IR-11 Ref: LOL Preliminary Statement of Position, page 23  
Please explain in greater detail the positive impacts that DG/CHP will have on power quality and reliability.

HECO/LOL-IR-12 Ref: LOL Preliminary Statement of Position, page 25

- a. Please explain in detail what components of HECO's IRP process need to be overhauled.
- b. Did LOL raise the issue of overhauling the IRP process in any IRP Advisory Group or Technical Committee meetings? If the answer is no, please explain why not.

HECO/LOL-IR-13 Ref: LOL Preliminary Statement of Position, pages 20-21  
Please provide LOL's assessment of the type and total MW of renewable DG that can be implemented on Oahu over the next 5 years.

HECO/LOL-IR-14 Ref: LOL Preliminary Statement of Position, page 24  
Please explain how DG that is fueled by fossil fuels can reduce the use of fossil fuel by 100%.

HECO/LOL-IR-15 Ref: LOL Preliminary Statement of Position, page 24  
Does LOL believe that there are financial and contractual risks and uncertainties associated with entering into long term contracts with IPPs?

HECO/LOL-IR-16 Ref: LOL Preliminary Statement of Position, page 24

- a. Is it the position of LOL that tearing down the Honolulu Power Plant and replacing it with on-site generation would be an appropriate use of "valuable harbor front lands"?
- b. Please explain how DG located closer to population centers is more "aesthetically pleasing" than central station generation located in an industrial zoned area.
- c. Please explain how DG is "earth friendly".

HECO/LOL-IR-17 Ref: LOL Preliminary Statement of Position, page 26  
HAR 6-74-7 applies to the criteria for and manner of becoming a qualifying small power production facility and a qualifying cogeneration facility. If the owner of a CHP facility

does not seek the benefits of being a qualifying facility, what are the limitations on ownership?

HECO/LOL-IR-18 Ref: LOL Preliminary Statement of Position, page 26  
Since HAR 6-74-7 prohibits utility ownership of a qualifying facility, how would the qualifying facility status impact other parties who own and operate a CHP system and file for qualifying facility status?

HECO/HELCO/MECO  
Information Requests (“IRs”) to The County of Maui (“Maui”)

HECO/Maui-IR-1     Ref: Maui Preliminary Statement of Position, page 4  
In order to facilitate the implementation of DG, isn’t it appropriate for the regulated electric utility to be an active participant in the DG market? If the answer is no, please explain why not.

HECO/Maui-IR-2     Ref: Maui Preliminary Statement of Position, page 4  
If DG and CHP systems are beneficial in helping to meet the State’s energy goals (e.g., increased energy efficiency and a reduction in the use of fossil fuels), then why would it not be reasonable for a regulated electric utility to be an active owner/operator in the DG/CHP market?

HECO/Maui-IR-3     Ref: Maui Preliminary Statement of Position, pages 1-2  
Does Maui believe that the Commission has the appropriate authority to oversee the regulated electric utilities’ involvement in DG/CHP projects? If the answer is no, please explain why not.

HECO/Maui-IR-4     Ref: Maui Preliminary Statement of Position, pages 1-2  
a. Does Maui acknowledge that to date there has been only a limited number of DG/CHP projects implemented in the State of Hawaii?  
b. Does Maui acknowledge that the involvement of the regulated electric utility in the DG/CHP market should result in a larger potential market for DG/CHP installations?

HECO/Maui-IR-5     Ref: Maui Preliminary Statement of Position, page 1  
Does Maui acknowledge that until the installation of DG/CHP systems increase and there is an adequate track record of these systems’ performance, that it would be premature at this time to assert that DG/CHP can delay and/or replace T&D facilities?

HECO/Maui-IR-6     Ref: Maui Preliminary Statement of Position, pages 1-2  
Does Maui believe that it is prudent for the regulated electric utility to adopt a portfolio type approach to meeting the electric needs of its customers with a combination of DG/CHP resources, central station generation, renewables, demand-side management programs and conservation initiatives?

HECO/Maui-IR-7     Ref: Maui Preliminary Statement of Position, page 3  
What are Maui’s specific recommended changes that should be made to electric rates and hookup charges to promote fair competition between electric utility service and DG services?

HECO/Maui-IR-8     Ref: Maui Preliminary Statement of Position, page 5  
Why is the County’s fiduciary responsibility different than other residential and commercial customers that seek to obtain the provision of reliable electric service at the lowest reasonable cost?



HECO/Maui-IR-9 Ref: Maui Preliminary Statement of Position, page 1  
Please explain in greater detail the positive impacts that DG/CHP will have on power quality and reliability.

HECO/Maui-IR-10 Ref: Maui Preliminary Statement of Position, page 4  
What is the expected cost to install synchronizing interconnection equipment, telemetry, and computer monitoring and control equipment for a typical backup generator?

HECO/Maui-IR-11 Ref: Maui Preliminary Statement of Position, page 4  
What permitting steps are required to allow the use of emergency backup generators in a “virtual” power plant?

HECO/Maui-IR-12 Ref: Maui Preliminary Statement of Position, page 4  
a. What is the specific gaseous fuel proposed for replacing diesel? How does the price and availability compare?  
b. What are the technical problems associated with fuel switching (i.e., what modifications would be required to the backup generators/)?

HECO/Maui-IR-13 Ref: Maui Preliminary Statement of Position, page 4  
How do you propose that consumer generators could generate revenue?

HECO/Maui-IR-14 Ref: Maui Preliminary Statement of Position, page 5  
Who would make the determination when to allow or disallow county wheeling?

HECO/Maui-IR-15 Ref: Maui Preliminary Statement of Position, page 4  
a. What type of fuel does the County’s backup generators currently use?  
b. If gaseous fuels, biodiesel, or other biofuels are not used by the County’s backup generators, why would MECO be required to switch to those fuels?

HECO/Maui-IR-16 Ref: Maui Preliminary Statement of Position, page 4  
Under what conditions, such as but not limited to the length of time per occurrence or number of occurrences per year, are the County or larger commercial backup generators allowed to run under?

HECO/Maui-IR-17 Ref: Maui Preliminary Statement of Position, page 4  
Can a backup generator be used to provide power to support MECO’s grid if it is not owned by the utility?

HECO/Maui-IR-18 Ref: Maui Preliminary Statement of Position, page 4  
a. What is the means of communication for the Virtual Power Plant (“VPP”) concept?  
b. In the event communication is severed, how will the various customer generators be engaged?  
c. Please provide a capacity value estimate of the VPP concept?  
d. How is the capacity value estimate derived?  
e. How do you account for the unavailability of the generators?

HECO/Maui-IR-19 Ref: Maui Preliminary Statement of Position, page 3

Please provide the results of the County's research on rate designs and cost allocation mechanisms. If not currently available, please provide preliminary findings and a timeline for producing the final results of the research.

HECO/HELCO/MECO  
Information Requests (“IRs”) to The Department of Business, Economic Development  
and Tourism (“DBEDT”)

HECO/DBEDT-IR-1 Ref: DBEDT Preliminary Statement of Position, page 9

- a. Is it DBEDT’s position that the electric utility’s IRP process should investigate localized least cost planning, or is DBEDT merely offering this concept as a suggestion?
- b. Did DBEDT raise the concept of localized least cost planning in any of the IRP Advisory Group or Technical Committee meetings? If the answer is no, please explain why not.
- c. What other regulated electric utilities investigate localized least cost planning?

HECO/DBEDT-IR-2 Ref: DBEDT Preliminary Statement of Position, page 23

Does DBEDT believe that it is prudent for the regulated electric utility to adopt a portfolio type approach to meeting the electric needs of its customers with a combination of DG/CHP resources, central station generation, renewables, demand-side management programs and conservation initiatives?

HECO/DBEDT-IR-3 Ref: DBEDT Preliminary Statement of Position, page 12

RE: Restructure distribution tariffs to reduce excessive fixed charges

- a. Please explain how this statement relates to HECO’s Schedule J and Schedule P rate schedules.
- b. Please explain what is meant by “excessive fixed charges” and how it relates to HECO’s Schedule J and Schedule P rate schedules.

HECO/DBEDT-IR-4 Ref: DBEDT Preliminary Statement of Position, page 8

Does DBEDT believe that the reason why so few residences have installed net metered systems is because they are not cost-effective relative to current utility electric rates?

HECO/DBEDT-IR-5 Ref: DBEDT Preliminary Statement of Position, page 10

What regulated electric utilities in other jurisdictions have adopted the recommendation that DBEDT cited from R. S. Brent of Solar Turbines Incorporated?

HECO/DBEDT-IR-6 Ref: DBEDT Preliminary Statement of Position, page 11

What is DBEDT’s recommendation to the Commission on the concept of decoupling regulated electric utility revenues from sales?

HECO/DBEDT-IR-7 Ref: DBEDT Preliminary Statement of Position, page 23

Please explain in greater detail the positive impacts that DG/CHP will have on power quality and reliability.

HECO/DBEDT-IR-8 Ref: DBEDT Preliminary Statement of Position, page 6

- a. Does DBEDT agree that there is a direct linkage between the size and configuration of a utilities electric system and necessary requirements for interconnection of DG?

- b. What characteristics of a DG system impact interconnection requirements?

HECO/DBEDT-IR-9 Ref: DBEDT Preliminary Statement of Position, page 23

Which factor is a greater determinant of whether or not a customer will accept a DG facility on its property – the desire of the customer for energy savings or a benefit that the utility may achieve regarding its distribution system?

HECO/DBEDT-IR-10 Ref: DBEDT Preliminary Statement of Position, page 24

DBEDT states that all commercially available forms of DG are feasible in Hawaii.

- a. How does DBEDT define “commercially available”?
- b. Does commercial availability account for elements such as cost effectiveness or whether a technology has been successfully demonstrated in Hawaii?

HECO/DBEDT-IR-11 Ref: DBEDT Preliminary Statement of Position

Exhibit 1 (page 1, footnote 1) to Prehearing Order No. 20922, issued April 23, 2004, states: “The Department of Business Economic Development and Tourism represented that it was interested in serving as a resource for technical information for the parties in the proceeding. Based on the representations of the participants, the parties agreed that the participants would be allowed to present recommendations on any of the issues in the instant proceeding provided that any recommendation be provided as the respective participant’s Preliminary Statement of Position, followed by written testimonies in support of said position in accordance with the Stipulated Regulatory Schedule attached to this Stipulated Prehearing Order.”

Please confirm that DBEDT will be following up its Preliminary Statement of Position with written testimonies in accordance with Prehearing Order No. 20922.

HECO/HELCO/MECO  
Information Requests (“IRs”) to The Consumer Advocate (“CA”)

HECO/CA-IR-1      Ref: CA Preliminary Statement of Position, pages 20-22  
Does the CA acknowledge that until the installation of DG/CHP systems increase and there is an adequate track record of these systems’ performance, that it would be premature at this time to assert that DG/CHP can delay and/or replace T&D facilities?

HECO/CA-IR-2      Ref: CA Preliminary Statement of Position, pages 25-27  
Does the CA believe that it is prudent for the regulated electric utility to adopt a portfolio type approach to meeting the electric needs of its customers with a combination of DG/CHP resources, central station generation, renewables, demand-side management programs and conservation initiatives?

HECO/CA-IR-3      Ref: CA Preliminary Statement of Position, pages 20-22  
a. Does the CA believe that rates need to be unbundled before regulated electric utility owned/operated CHP systems can be implemented?  
b. Please identify other jurisdictions that have traditional utility regulation as in Hawaii that have unbundled rates to facilitate the development of DG.

HECO/CA-IR-4      Ref: CA Preliminary Statement of Position, pages 11-13  
Does the CA propose that modifications need to be made to HECO’s Rule 14H?

HECO/CA-IR-5      Ref: CA Preliminary Statement of Position, page 6  
How does the CA define the terms “viable” and “feasible”?

HECO/CA-IR-6      Ref: CA Preliminary Statement of Position, page 20  
If the utility or a 3<sup>rd</sup> party installs a DG system on a customer’s site and the DG unit is sized to meet only the needs of that customer and no export to the grid is expected, what should the competitive bidding requirements be?

HECO/HELCO/MECO  
Information Requests (“IRs”) to Kauai Island Utility Cooperative (“KIUC”)

HECO/KIUC-IR-1    Ref: KIUC Preliminary Statement of Position, pages 12-13  
Does KIUC acknowledge that until the installation of DG/CHP systems increase and there is an adequate track record of these systems’ performance, that it would be premature at this time to assert that DG/CHP can delay and/or replace T&D facilities?

HECO/KIUC-IR-2    Ref: KIUC Preliminary Statement of Position, pages 18-19  
Does KIUC believe that it is prudent for the regulated electric utility to adopt a portfolio type approach to meeting the electric needs of its customers with a combination of DG/CHP resources, central station generation, renewables, demand-side management programs and conservation initiatives?

HECO/KIUC-IR-3    Ref: KIUC Preliminary Statement of Position, pages 18-19  
Does KIUC believe that it is prudent for the regulated electric utility to adopt a portfolio type approach to meeting the electric needs of its customers with a combination of DG/CHP resources, central station generation, renewables, demand-side management programs and conservation initiatives?

HECO/HELCO/MECO  
Information Requests ("IRs") to Hess Microgen LLC ("Hess")

HECO/Hess-IR-1      Ref: Hess Preliminary Statement of Position, page 6  
Does Hess acknowledge that until the installation of DG/CHP systems increase and there is an adequate track record of these systems performance, that it would be premature at this time to assert that DG/CHP can delay and/or replace T&D facilities?

HECO/Hess-IR-2      Ref: Hess Preliminary Statement of Position, page 10  
Does Hess believe that it is prudent for the regulated electric utility to adopt a portfolio type approach to meeting the electric needs of its customers with a combination of DG/CHP resources, central station generation, renewables, demand-side management programs and conservation initiatives?

HECO/Hess-IR-3      Ref: Hess Preliminary Statement of Position, page 5  
Please explain in greater detail the positive impacts that DG/CHP will have on power quality and reliability.

HECO/Hess-IR-4      Ref: Hess Preliminary Statement of Position, pages 7-9  
Please provide an estimate in terms of barrel of LSFO or diesel fuel to support the statement that "The deployment of DG, especially CHP, can vastly reduce the use of fossil fuel in Hawaii."

HECO/Hess-IR-5      Ref: Hess Preliminary Statement of Position, page 9  
What specific section of IEEE 1547 should be incorporated into HECO's Rule 14H?

HECO/Hess-IR-6      Ref: Hess Preliminary Statement of Position, page 5  
Please provide forced outage information for a single unit, a two-unit and a triple unit DG installation. What is the basis for the information (i.e., based on actual DG unit installations).

HECO/Hess-IR-7      Ref: HESS Preliminary Statement of Position, pages 5-6  
With regard to the following statements,  
a. "Many Hess sites are designed for multiple units. The occurrences of internally caused simultaneous outages, even with just two units, are extremely rare."  
b. "The Hess units on customer's sites are not part of the utility's grid, thus, these units are able to operate when the utility's grid is down. Also, because Hess units on customer's sites are sized on thermal load versus electrical load, thus never covering 100% of a customer's electrical needs, the Hess units do not feedback into the utility's grid and, thus, do not have a negative impact to the utility's grid."  
Will the combined MW capacity of multiple unit DG installations be sized to cover less than 100% of a customer's electrical need?

HECO/Hess-IR-8      Ref: Hess Preliminary Statement of Position, page 5  
What hours during the day is used to define the 60% off-peak period?

HECO/Hess-IR-9 Ref: Hess Preliminary Statement of Position, page 4

Is it necessary for the utility to provide back-up generation and T&D facilities to cover a DG outage that may occur during the peak period? If the answer is no, please explain why not.

HECO/Hess-IR-10 Ref: Hess Preliminary Statement of Position, page 4

What is your estimate of the T&D line losses incurred by the Hawaii utilities?

HECO/Hess-IR-11 Ref: Hess Preliminary Statement of Position, page 5

What aspects of a DG facility should the utility be able to control to ensure the highest level of power quality and reliability?

HECO/Hess-IR-12 Ref: Hess Preliminary Statement of Position, page 10

- a. What specific information do you think utilities should make available to private companies?
- b. How can the utilities honor the desires of specific customers to keep certain cost data confidential?